We claim:-

1. A printing ink for letterpress and/or offset printing, comprising at least one nonpolar solvent, a binder, a colorant absorbing in the visible spectral range and an NIR absorber which has substantially no absorption in the visible spectral range, wherein the solubility of the NIR absorber in the printing ink is at least 0.1% by weight, based on all components of the printing ink, with the proviso that the solubility of the NIR absorber is greater than or equal to the concentration of the NIR absorber in the printing ink.

2. The printing ink according to claim 1, wherein the solubility of the NIR absorber is at least 0.2% by weight.

3. The printing ink according to claim 1 or 2, wherein the NIR absorber is at least one NIR absorber selected from the group consisting of cyanines, naphthalocyanines, squaraines and croconates.

4. The printing ink according to claim 3, wherein the NIR absorber is an ionic absorber comprising a cyanine cation X^+ and a corresponding anion $^1/_m Y^{m-}$, the cyanine cation having a general formula selected from the group consisting of (I) to (IV)


(I)

(II)

(III)

(IV)
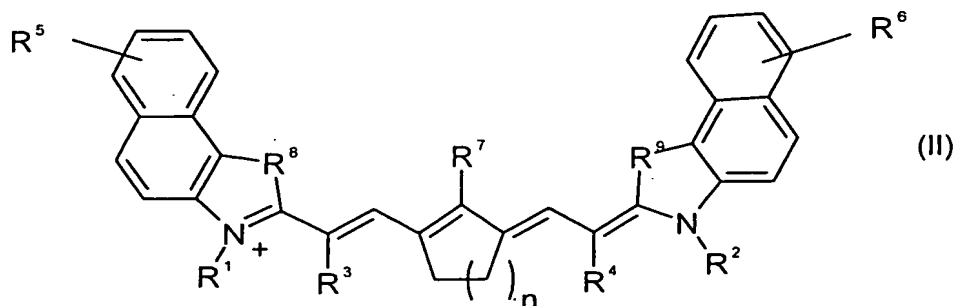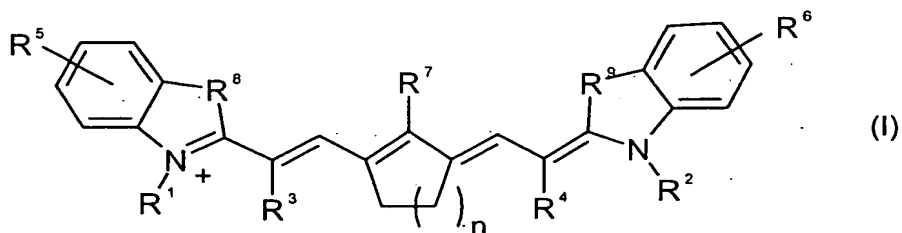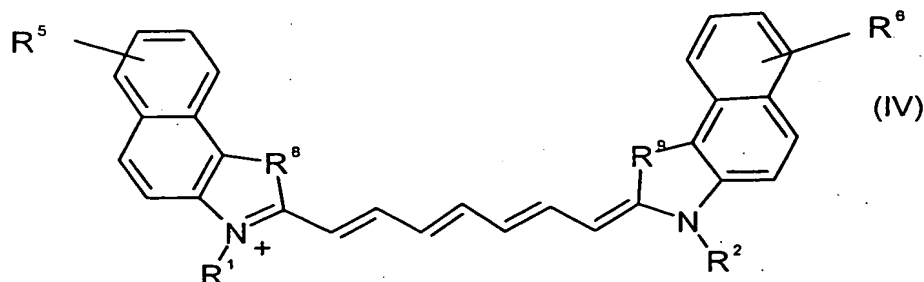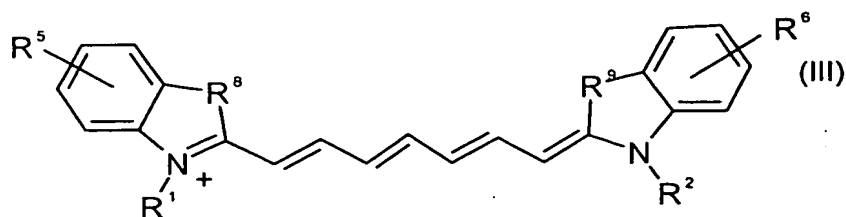
n is 1 or 2 and the radicals R^1 to R^9 have the following meanings:

5

- R^1 and R^2, independently of one another, are a linear or branched, optionally further substituted alkyl or aralkyl radical having 1 to 20 carbon atoms,

- R^3 and R^4, independently of one another, are H or CN,

10

- R^5 and R^6, independently of one another, are one or more, identical or different substituents selected from the group consisting of -H, -F, -Cl, -Br, -I, $-NO_2$, -CN, $-CF_3$, $-R^1$, $-OR^1$, aryl- or -O-aryl,

15 - R^7 is -H, -Cl, -Br, -I, -phenyl, -O-phenyl, - S-phenyl, $-N(phenyl)_2$, -pyridyl, a barbituric acid radical or a dimedone radical, it also being possible for the phenyl radicals to be further substituted,

- R^8 and R^9, independently of one another, are $>C(CH_3)_2$, -O-, -S-, $> NR^1$ or

20 -CH=CH-,

and the anion Y^{m-} has the general formula $[AR^{10}_k]^{m-}$ with a polar, ionic head group A and k nonpolar groups R^{10}, k is 1, 2 or 3 and m is 1 or 2, and the nonpolar groups R^{10}, independently of one another, are selected from the group consisting of

25 - linear, branched or cyclic alkyl groups having 6 to 30 carbon atoms and

alkylaryl groups of the general formula -aryl-R^{11}, where R^{11} is a linear or branched alkyl group having 3 to 30 carbon atoms, and/or the anion Y^{m-} is a borate anion of the general formulae (V) or (VI)
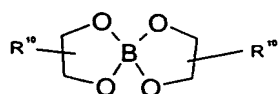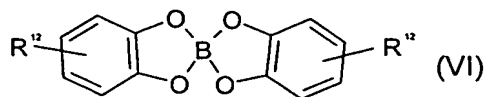

where R^{10} is as defined above and R^{12} is at least one substituent selected from the group consisting of H and linear, cyclic or branched alkyl groups having 1 to 20 carbon atoms, and

in the radicals R^{10}, R^{11} and R^{12}, even nonneighboring carbon atoms may optionally be substituted by O atoms and/or the radicals R^{10}, R^{11} and R^{12} may be completely or partly fluorinated, with the proviso that the nonpolar character of the group is not substantially influenced thereby.

5. The printing ink according to claim 4, wherein the polar, ionic head group A is a monobasic or dibasic acid radical selected from the group consisting of $-SO_3^-$, $-OSO_3^-$, $-COO^-$, $-PO_3^{2-}$, $-OPO_3^{2-}$ or $(-O)(-O)PO_2^-$.

6. The printing ink according to claim 4 or 5, wherein R^{10} is a linear, branched or cyclic alkyl group having 6 to 12 carbon atoms.

7. The printing ink according to claim 6, wherein R^{10} is a linear alkyl group.

8. The printing ink according to claim 4 or 5, wherein R^{11} has 6 to 12 carbon atoms.

9. The printing ink according to claim 8, wherein R^{11} is a linear alkyl group.

10. The printing ink according to any of claims 1 to 9, wherein the amount of the NIR absorber in the printing ink is from 0.05 to 4% by weight, based on the sum of all components of the ink.

11. The use of a printing ink according to any of claims 1 to 10 in printing processes in which the curing of the printing ink is promoted by using IR radiation sources whose wavelength is not resonant with the absorption wavelengths of water.

12. An NIR absorber consisting of a cyanine cation X^+ and a corresponding anion $1/_m Y^{m-}$, the cation having a general formula selected from the group consisting of (I) to (IV)

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(I)

(II)

(III)

(IV)
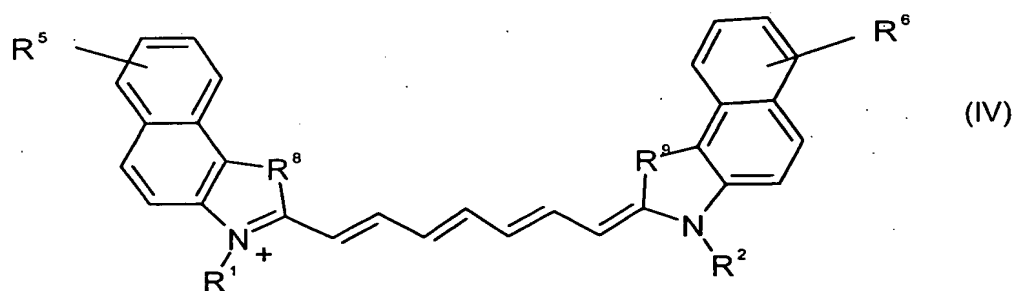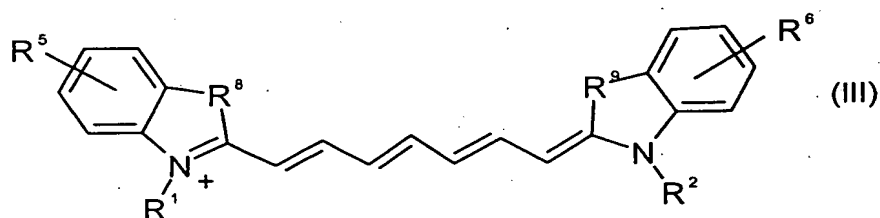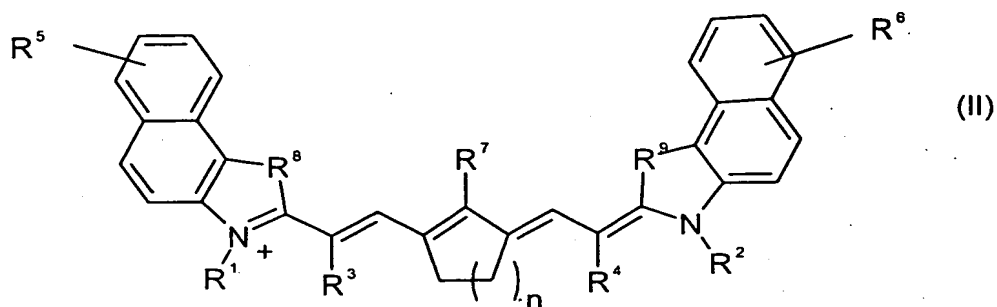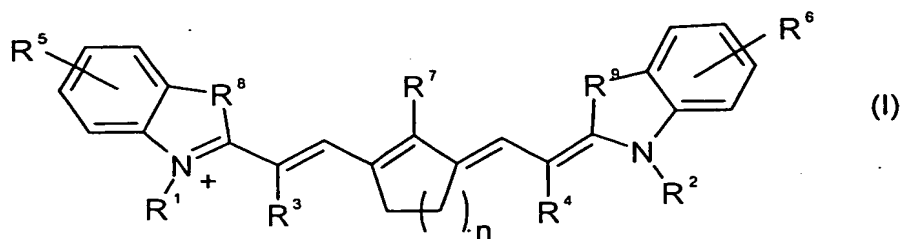
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15 group consisting of

    —   linear, branched or cyclic alkyl groups having 6 to 30 carbon atoms and alkylaryl groups of the general formula -aryl-R^{11}, where R^{11} is a linear or branched alkyl group having 3 to 30 carbon atoms, and/or

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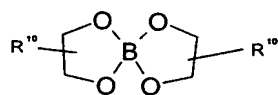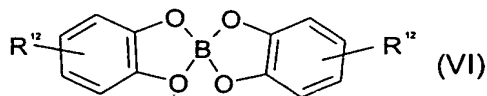
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30 character of the group is not substantially influenced thereby.

13. The NIR absorber according to claim 12, wherein the monobasic or dibasic acid radical A is selected from the group consisting of $-SO_3{}^-$, $-OSO_3{}^-$, $-COO^-$, $-PO_3{}^{2-}$, $-OPO_3{}^{2-}$ or $(-O)(-O)PO_2{}^-$.

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14. The NIR absorber according to claim 12 or 13, wherein R^{10} is a linear or branched alkyl group having 6 to 12 carbon atoms.

15. The NIR absorber according to claim 14, wherein R^{10} is a linear alkyl group.

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16. The NIR absorber according to claim 12 or 13, wherein R^{11} has 6 to 12 carbon atoms.

17. The NIR absorber according to claim 16, wherein R^{11} is a linear alkyl group.